Multidrug resistance was defined as being intermediate or resistant to at least 3 of these 6 drugs: amikacin, gentamicin, ciprofloxacin, piperacillin, ceftazidime, and imipenem.
Results: Forty-eight episodes of bloodstream infections were identified in 30 patients (5 women; mean age 28.5 years). Gram-negative isolates were *Pseudomonas aeruginosa* in 12 (25%), *Enterobacter cloacae* in 4 (8.3%), *Escherichia coli* in 2 (4.2%), and *Acinetobacter spp* in 2 (4.2%) of the episodes. There were more primary bloodstream infections in the control group, whereas secondary bloodstream infections from wound infections were more common in patients in the multidrug-resistant group. Regarding prior antibiotic use, aminoglycoside use was significantly higher in patients in the multidrug-resistant group ($p<0.001$). See Table 1.
Conclusion: Multidrug-resistant strains of bacteria are being increasingly reported. In these cases, the choice of therapy often becomes limited. Several factors suggest that the emergence and spread of multidrug-resistant non-fermenting bacteria is related to the overuse of antimicrobial agents, although the degree of risk appears to differ with different agents. A strong association between use and resistance has been documented for carbapenems. In this study, previous use of aminoglycosides was found to be statistically significant for MDR strains.

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Colistin: An Old Drug for Difficult-to-treat Burn Infections Caused by *Pseudomonas Aeruginosa*

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Introduction: Colistin was re-introduced into clinical practice during the last years for the treatment of nosocomial infections caused by multidrug-resistant Gram-negative bacteria. The aim of this study is to evaluate the efficacy and side effects of colistin in the burn infections caused by pan-resistant *Pseudomonas aeruginosa* strains.
Materials and Methods: Medical records of seven burn patients who received colistin were evaluated retrospectively. Underlying diseases, site of infection, antibacterial susceptibility pattern of the causative agent, clinical progress, laboratory findings especially renal function tests, dose of colistin and side effects of colistin were the data collected. Deterioration of renal function was defined as an increase of more than 50% of the baseline to a value higher than 1.3mg/dL or as a need for renal replacement therapy.
Results: All seven burn patients had burn wounds infected with pan-resistant *P. aeruginosa* and two of these also had bacteremia. Two burn patients died during colistin treatment; one was due to other causes except infection (extensive burn), and the other had febrile disease probably associated with *P. aeruginosa*. Adult patients who had normal renal function tests received a dose range of 1-3 million units q8h. Patients received colistin for 4 to 21 days. Cultures from the infected sites became sterile in the range of 2 days-13 days. Neurotoxicity, nephrotoxicity, skin rash or gastrointestinal disturbances was not observed in any of these patients.
Conclusion: Limited data obtained from seven patients show that intravenous colistin constitutes a relatively safe and effective therapeutic intervention in cases of severe burn infections caused by multidrug-resistant Gram-negative bacteria.

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Fungal Infections in Burn Patients

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Introduction: Fungal infections particularly bloodstream infections due to *Candida spp*. cause high morbidity and mortality in healthcare settings. Burn patients are vulnerable to fungal infections because they generally receive broad spectrum antibacterial therapy and total parenteral nutrition.
Objective: The objective of this study is to determine the incidence of fungal infections in burn patients.
Materials and Methods: Medical records of 290 burn patients hospitalized between the years 2003 and 2007 at Baskent University Burn Unit were evaluated retrospectively. Infections were defined according to the criteria described in Taneja's article. Two hundred and ninety burn patients were followed during the five-year period; the ages of the patients were within the range of 2 months and 90 years and 88 (30%) were female.
Results: Twenty-five fungal infection episodes caused by *Candida spp*. were diagnosed in 20 patients during the five-year period. Fourteen of these episodes were bloodstream infections, six were urinary tract infections and five were burn wound infections. Nine of the fourteen (64%) candidemia episodes were due to *Candida albicans* and the remaining five (36%) were due to non-albicans *Candida spp*.
Conclusion: Management of fungal infections in burn patients should deserve more attention because of high mortality rates. Appropriate antifungal therapy is of great importance. One third of fungal causes of bloodstream infections in this study are non-albicans *Candida* strains. The various antifungal susceptibility profiles of non-albicans *Candida* strains mandates the documentation of antifungal susceptibility results.

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Caspofungin for Prophylaxis of Intraabdominal Candidiasis in High-Risk Surgical Patients: a Pilot Study

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Background: We have previously shown that 30-40% of surgical patients with recurrent gastrointestinal perforation/anastomotic leakage, or acute necrotizing pancreatitis develop intraabdominal candidiasis (IC) (Lancet 1989, 2:1437). These patients benefit of fluconazole prophylaxis (Px) (Crit Care Med 1999, 27:1066). A corrected *Candida* colonization index (CCI) $\geq$0.4 is a major risk factor for IC (Ann Surg 1994, 220:751). CSP, a new therapy for IC including azole-resistant *Candida spp.*, may be used for Px of IC.
Objective: To conduct a non-comparative pilot study on the efficacy and safety of caspofungin (CSP) for Px of IC in high-risk surgical patients.
Methods: Inclusion criteria: age $>$18, surgery for recurrent gastrointestinal perforations/anastomotic leakage or acute pancreatitis. Exclusion criteria: documented IC, fluconazole Px. CSP Px (70 mg, then 50 mg/day) was given until resolution of the surgical condition. *Candida* colonization was monitored 1x weekly at $\geq$3 sites and the CCI calculated. Success was defined by the absence of IC during CSP Px. Occurrence of CSP-related SAE was recorded.
Results: Nineteen patients were enrolled: 16/3 males/females, median age 69 (range 40-84). Underlying surgical conditions were: recurrent gastrointestinal perforation/anastomotic leakage (n),